APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,415	10/24/2001	Richard A. Johnson	50325-0559	3085

			EXAMINER
29989	7590	02/10/2005	NGUYEN, PHUOC H

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ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<table>
<tr><td rowspan="2">Office Action Summary</td><td>Application No.
10/001,415</td><td>Applicant(s)
JOHNSON ET AL.</td></tr>
<tr><td>Examiner
Phuoc H. Nguyen</td><td>Art Unit
2143</td></tr>
</table>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>24 October 2001</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-31</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-31</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>24 October 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>March 6, 2002</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2.   Claims 1,5,9,19,21,22, and 24, rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3.   Claim 1, the limitation *"sending a first request and second message requesting"* is unclear whether the *sending a first request and second message requesting* is coming from the same host or not.   For examination purposes, the examiner considers this limitation as coming from two different hosts such as RF modems 106 (a-n) or router.

4.   Claims 5,9,19,21,22, and 24, applicant use the term *determining usage*; however, determining usage is unclear whether applicant use term usage as a statistical, number of counts, number of IP address(es), or traffic in the network, etc. For examination purposes, the examiner considers this limitation as number of IP address that have been used.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this

subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6.   Claim 1 rejected under 35 U.S.C. 102(e) as being anticipated by Schutte et al. (Hereafter, Schutte) U.S. Patent 6,178,455.

7.   Regarding claims 1,23-27, and 31, Schutte discloses a method of providing sets of network addresses for dynamically configuring hosts on a network (Figures 1 and 12), the method comprising the computer-implemented steps of: sending a first request (eg. DHCPDISCOVER message) for a first count of network addresses for a first set of network addresses (eg. number of IP addresses requested) for dynamically configuring hosts on the network (col. 16 lines 43-45); receiving a first message indicating the first set of network addresses (eg. DHCP receive the DHCPDISCOVER message) (col. 16 lines 39-43); receiving a second message requesting a second count of network addresses for a second set of network addresses for dynamically configuring hosts on the network (eg. Figure 1 discloses a multiple RF modems (106 a-n) provide IP address(es) to a plurality of PCs (108 a-n). Inherently, each of the RF modems such as 106a sending a second request for second count of the network addresses for a second set of network addresses (eg. number of IP addresses requested)); determining the second set of network addresses based at least in part on the first set of network addresses and the second count, and sending a first response indicating the second set of network addresses (col. 16 lines 57 through col. 17 1st paragraph).

8.   Regarding claim 2, Schutte further discloses receiving, from a first host on the network (eg. IPA manager 1204), a third message requesting a network address, and sending, to the first host in response to the second message, a second response offering a first network address based

on the first set of network addresses and the second set of network addresses (col. 16 lines 57

through col. 17 1st paragraph).

9.   Regarding claim 3, Schutte further discloses the first set includes the first network

address and the second set does not include the first network address (eg. IPA manager has a list

of free IP addresses and based on the free addresses list it then assign IP addresses to appropriate

requested) (col. 17 1st paragraph).

10.   Regarding claim 4, Schutte further discloses receiving from a network administrator a

third message indicating a third set of network addresses for dynamically configuring hosts on

the network (col. 10 lines 15-31).

11.   Regarding claim 5, Schutte further discloses determining usage of the first set

of network addresses (col. 17 2nd paragraph).

12.   Regarding claim 6, Schutte further discloses reporting the usage of the first set

of network addresses (col. 17 2nd paragraph).

13.   Regarding claim 7, Schutte further discloses determining the second set of network

addresses are further based at least in part on the usage of the first set of network addresses (col.

16 lines 57 through col. 17 2nd paragraph).

14.   Regarding claim 8, Schutte further discloses the first message further indicates a first

time interval for use of the first set, and the method further comprises sending, before the first

time interval expires, a second request for renewal of use of the first set; and the second request

includes data indicating the usage of the first set (col. 17 lines 49-64).

15.   Regarding claim 9, Schutte further discloses receiving a third message for renewal of use

of the second set, the third message including data indicating the usage of the second set,

determining a third set of network addresses for dynamically configuring hosts on the network

based on the second set and the usage of the second set, and sending a second response

indicating the second set of network addresses (col. 17 lines 49-64).

16.   Regarding claim 10, Schutte further discloses each set of the first set and the second set is

indicated by a base address and a number indicating a range of addresses above the base address

(col. 10 lines 49 through col. 11 lines 37).

17.   Regarding claim 11, Schutte further discloses the number indicating the range is a mask

that indicates a number of most significant bits in the base address that are constant over the

range (col. 10 lines 49 through col. 11 lines 37).

18.   Regarding claim 12, Schutte further discloses second set is empty (eg. no user request for

IP address).

19.   Regarding claim 13, Schutte further discloses the second set is the same as the first set

(eg. whenever number users of 1st subnet is equal users on the 2nd subnet).

20.   Regarding claim 14, Schutte further discloses the hosts on the network include interfaces

on a router on the network (Figure 1).

21.   Regarding claim 15, Schutte further discloses receiving, from a router on the network, a

third message requesting a third count of network addresses for a third set of network addresses

for configuring interfaces on the router, determining the third set of network addresses based at

least in part on the first set of network addresses, the second set of network addresses, and the

third count, and sending, to the router in response to the third message, a second response

indicating the third set of network addresses (Abstract; further rejected in the same rationale as

rejected in the RF modems because both Router and RF modems are requested set of IP address from the DHCP server and IP addresses are provided by the IPA manager) .

22.   Regarding claim 16, Schutte further discloses the first message received includes data indicating that a first server should send a third set of network addresses for dynamically configuring hosts on the network, and the method further comprises sending, in response to the data indicating that the first server should send the third set, a second request for the third set of network addresses (col. 16 lines 57 through col. 17 1st paragraph).

23.   Regarding claim 17, Schutte further discloses receiving, from the first server in response to the second request, a third message indicating the third set of network addresses (Abstract; and col. 16 lines 57 through col. 17 1st paragraph).

24.   Regarding claim 18, Schutte further discloses determining that a third set of network addresses should be sent based at least in part on the first set and the second set, and inserting into the first response data indicating that a third set of network addresses for dynamically configuring hosts on the network should be sent (eg. Figures 1 and 12, discloses a router or multiple RF modems (106 a-n) provide IP address(es) to a plurality of PCs (108 a-n). Inherently, router and each of the RF modems such as 106a sending n-request for number of counts (eg. number IP addresses requested) of the network addresses for a n-set of network addresses (eg. number of IP addresses requested) and based upon the Per NET Free IP Address List 1211 the IPA manager will then assign n-set of network addresses to the router or multiple RF Modems).

25.   Regarding claim 19, Schutte further discloses the method further comprises determining usage of the first set of network addresses, and said step of determining that a third set of

network addresses should be sent is based at least in part on the usage of the first set (col. 16 lines 56 through col. 17 lines 31).

26.   Regarding claim 20, Schutte further discloses receiving, in response to the data indicating that the third set of network addresses should be sent, a third message requesting the third set of network addresses (col. 16 lines 56 through col. 17 lines 31).

27.   Regarding claim 21, Schutte discloses receiving, from a first server on the network, a first message indicating a first set of network addresses for dynamically configuring hosts on the network and a first time interval for use of the first set (eg. router or RF modems receive a set of IP addresses from the IPA manager and this set of addresses is contain the lease mechanism which limited period of time) (col. 16 last paragraph); determining usage of the first set of network addresses (col. 16 last paragraph); and sending, to the first server before the first time interval expires, a second request for renewal of use of the first set, wherein the second request includes data indicating the usage of the first set (col. 17 lines 49-64).

28.   Regarding claim 22, Schutte discloses sending, to a first server on the network, a first message indicating a first set of network addresses for dynamically configuring hosts on the network and a first time interval for use of the first set (eg. router or RF modems send a renewal request for a first set of IP addresses to the IPA manager) (col. 17 lines 49-64); receiving, from the first server before the first time interval expires, a request for renewal of use of the first set, the request including data indicating the usage of the first set (eg. IPA manager receive a request for renewal a first set of network addresses)(col. 17 lines 49-64), determining a second set of network addresses for dynamically configuring hosts on the network based on the first set and

the usage of the first set, and sending to the first server a second message indicating the second

set of network addresses (col. 17 lines 49-64).

29.   Regarding claim 28, Schutte further discloses the second message includes data

indicating that a requesting device that issued the second message does not make assignments of

individual network addresses from among the second set of network addresses such that all

future requests for such assignments will be relayed back (eg. Each address in the set of

addresses are assign to the router or RF modem is contain a lease mechanism with can only for a

limited period of time) (col. 17 lines 49-56).

30.   Regarding claim 29, Schutte further discloses the second message includes data

indicating that a requesting DHCP server should free the second set of network addresses as soon

as possible by making no new assignments of addresses or subnets therefrom (eg. when the RF

modems is inactive the IP addresses assign to the RF modems will be deassign back to the IPA

manager) (col. 17 lines 32-48).

31.   Regarding claim 30, Schutte further discloses that a requesting DHCP server should

discontinue use of the second set of network addresses when all addresses in the subnet are

unassigned (eg. when the RF modems is inactive the IP addresses assign to the RF modems will

be deassign back to the IPA manager) (col. 17 lines 32-48).

Conclusion

32.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Beser U.S. Patent 6,775,276

Bahlmann U.S. Patent 6,578,074

Hejza U.S. Patent 6,577,628

Woundy U.S. Patent 6,009,103

Reichmeyer et al. U.S. Patent 6,286,038

Ohno et al. U.S. Patent 6,219,715

Bruck et al. U.S. Patent 6,801,949

Borsato et al. U.S. Patent 6,654,891

Gai et al. U.S. Patent 6,697,360

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuoc H. Nguyen whose telephone number is 571-272-3919. The examiner can normally be reached on Mon -Thu (7AM-4: 30PM) and off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuoc H. Nguyen
Examiner
Art Unit 2143

DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

January 31, 2005